

98TH CONGRESS }
2d Session }

SENATE

{ REPORT
{ 98-429

AUTHORIZING AND DIRECTING THE LIBRARIAN OF CONGRESS, SUBJECT TO THE SUPERVISION AND AUTHORITY OF A FEDERAL, CIVILIAN, OR MILITARY AGENCY, TO PROCEED WITH THE CONSTRUCTION OF THE LIBRARY OF CONGRESS MASS BOOK DEACIDIFICATION FACILITY, AND FOR OTHER PURPOSES

MAY 3 (legislative day, APRIL 30), 1984.—Ordered to be printed

Mr. MATHIAS, from the Committee on Rules and Administration, submitted the following

REPORT

[To accompany S. 2418]

The Committee on Rules and Administration, to which was referred the bill (S. 2418) to authorize and direct the Librarian of Congress, subject to the supervision and authority of a Federal, civilian, or military agency, to proceed with the construction of the Library of Congress Mass Book Deacidification Facility, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

PURPOSE OF THE BILL

The bill authorizes appropriations to construct the Library of Congress Mass Book Deacidification Facility at Fort Detrick near Frederick, Maryland, beginning in fiscal year 1984, subject to the supervision and construction authority of a Federal, civilian, or military agency. This new facility would be used to neutralize acid in book paper, thereby extending the life of books in the Library's collections by 400 to 600 years. At present the effective life for acid paper books is thirty to forty years.

BACKGROUND

The Library of Congress, and libraries throughout the world, face a crisis caused by the rapid deterioration of books printed on paper produced since the 1850s. It is ironical that the very technology which has enabled inexpensive books to be produced in vast numbers carried with it the seeds of its own destruction. The industrial revolution a

century and a half ago phenomenally increased the demand for paper products of all sorts, especially the demand for newspapers, magazines, and above all, the printed book. As a result, scientists and engineers began casting about for a cheaper and more plentiful paper supply. Prior to the 1850s, books had been printed on linen or cotton rag paper and, in some cases, on vellum made from animal skins. Technologists discovered their new paper supply in the cellulose fibers from ordinary wood pulp. Finding the right absorbency for the dried and finished paper, however, required treating and sizing the wood pulp paper with a variety of chemicals. Unfortunately, these chemical additives, especially aluminum sulphate, combine with the moisture in the air to form sulphuric acid. Any of us with books published since the 1850s have experienced this same disheartening phenomenon—the books literally disintegrating in our hands.

The ingenious chemists in the Library of Congress' own preservation and restoration office have found the solution to this problem. These chemists have developed a patented process that will neutralize the harmful acids destructive to paper and leave an alkaline reserve on the paper to combat the return to an acid condition in the future. The process is based on the vapor-phased impregnation of books and other library materials with diethyl zinc resulting in the neutralization of the acidity and a residue of zinc carbonate to protect the paper from further acid-induced loss of strength. Invention of this process by the Library's chemists began with tests in an ordinary pressure cooker. After further successful tests with larger numbers of books in facilities of the General Electric Company in Valley Forge, Pennsylvania, the Library staff worked with scientists at the National Aeronautics and Space Administration to develop and test an economical technique for the mass deacidification of books printed on paper susceptible to this type of deterioration. NASA's experience with vacuum technology and its facilities at Goddard Space Flight Center in nearby Greenbelt, Maryland, made it possible for the Library to demonstrate the feasibility of large-scale applications. The success of the Library and NASA's first large experiment with five thousand books proves it is time to establish a permanent book deacidification facility for the Library of Congress at Fort Detrick.

COMMITTEE ACTION

On April 11, 1984, the Committee on Rules and Administration held hearings on S. 2418. Representative Beverly Byron of Frederick, Maryland, the Librarian of Congress and his staff, a panel of experts from the American Library Association and the Association of Research Libraries, and other officials from Frederick, Maryland, testified in favor of the construction of this facility at Fort Detrick, subject to the supervision and construction authority of a Federal, civilian or military agency.

This measure is being sponsored by members of the Rules Committee and the Joint Library Committee, as follows: Senator Mathias and Senator Ford, and Senators Hatfield, Warner, and Inouye. Senator Cranston and Senator Sarbanes are also cosponsors.

COMMITTEE FINDINGS

S. 2418 appears to be non-controversial and to have bipartisan support. This bill would authorize 11.5 million dollars for this new building, its equipment, and its laboratory facilities. Funds for this activity are included in the Library's fiscal year 1985 budget and it is anticipated that the Army Corps of Engineers will construct the building within the complex of army and research facilities at Fort Detrick. Both the House and Senate Appropriations Committees are cognizant of the need for this authorization as they consider the supplemental and regular appropriations measures for fiscal year 1985. The Army Corps of Engineers estimates that the building will cost \$3.5 million; laboratory facilities and equipment, together with directly related costs, total \$8 million. These capital costs will be included in the Library's fiscal year 1985 appropriations provisions. Deacidification costs in this mass facility are estimated to be \$3-5 per book, an amount dramatically less expensive than the alternative cost of approximately \$30 for microfilming each book.

Operating costs for this laboratory facility are expected to be between \$2-3 million per year, including three or four new positions to staff the facility. Once appropriations are enacted, approximately 500,000 books will be deacidified each year using this revolutionary new technology. The Librarian of Congress will request these operating funds in his fiscal 1986 budget request. With 80 million items in the Library's great collections, the Committee anticipates an indefinite need for such a facility.

Enactment of this bill, together with the subsequent appropriations, will enable the Library of Congress to preserve a great national treasure, namely, three quarters of the Library's vast collection of books, from rapid and total disintegration. It will also make it possible to preserve these books in their natural and original state, that magnificent product of the printer's and publisher's art, the hand-held book. Construction of this "first of a kind" laboratory facility will also provide a prototype for the library and scholarly community throughout the country, and, for that matter, throughout the world. The Librarian of Congress is to be commended for his outstanding leadership in this matter.

COMMITTEE AMENDMENT

The Committee on Rules and Administration concurred with the authorization request of sums not to exceed \$11,500,000 to carry out the provisions of this Act, but the Committee changed "the fiscal year beginning after September 30, 1984," to "the fiscal year beginning after September 30, 1983," in order to allow flexibility as to how the Appropriations Committee will fund this activity. The Appropriations Committee may want to include funds for this activity in a fiscal year 1984 supplemental or the regular fiscal year 1985 Legislative Branch Appropriations Bill.

COST ESTIMATE

In compliance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate, the estimate of costs of this measure, prepared by the Congressional Budget Office pursuant to section 403 of the Congressional Budget Act, is as follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, D.C., May 3, 1984.

HON. CHARLES MCC. MATHIAS,
Chairman, Committee on Rules and Administration, Washington, D.C.

DEAR MR. CHAIRMAN: The Congressional Budget Office has reviewed S. 2418, a bill to authorize and direct the Librarian of Congress to proceed with the construction of the Library of Congress Mass Book Deacidification Facility, as ordered reported by the Senate Committee on Rules and Administration, May 1, 1984.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

RUDOLPH G. PENNER.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: S. 2418.
2. Bill title: To authorize and direct the Librarian of Congress to proceed with the construction of the Library of Congress Mass Book Deacidification Facility.
3. Bill status: As ordered reported by the Senate Committee on Rules and Administration on May 1, 1984.
4. Bill purpose: This bill authorizes appropriations to construct the Library of Congress Mass Book Deacidification Facility beginning in fiscal year 1984. This bill is subject to subsequent appropriations action.
5. Estimated cost to the Federal Government:

Authorization level:

Fiscal year:	Millions
1984	\$11.5
1985	-----
1986	-----
1987	-----
1988	-----
1989	-----

Estimated outlays:

Fiscal year:	
1984	1.1
1985	4.1
1986	6.3
1987	-----
1988	-----
1989	-----

The costs of this bill fall in function 500.

Basis of Estimate: The authorization level is stated in the bill. Full appropriation of the authorization level is assumed in this estimate.

Outlays are based on the Army Corps of Engineers' estimate for the construction.

6. Estimated cost to State and local governments: The budgets of state and local governments would not be affected directly by the enactment of this bill.

7. Estimate comparison: None.

8. Previous CBO estimate: None.

9. Estimate prepared by: Stacey Sheffrin.

10. Estimate approved by: C. G. Nuckols (for James L. Blum, Assistant Director for Budget Analysis).

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11 (b) of rule XXVI of the Standing Rules of the Senate, the Committee on Rules and Administration does not consider that enactment of S. 2418 would have any regulatory impact.



On the 1st of July, 1891, the first of the season's rain fell in the

county, and the weather was very warm and sunny. The people of

the county were very much surprised at the early rain, and

the weather was very much improved. The people of the county

were very much surprised at the early rain, and the weather was

very much improved. The people of the county were very much

surprised at the early rain, and the weather was very much

improved. The people of the county were very much surprised at

the early rain, and the weather was very much improved. The

people of the county were very much surprised at the early rain,

and the weather was very much improved. The people of the

county were very much surprised at the early rain, and the

weather was very much improved. The people of the county

were very much surprised at the early rain, and the weather was

very much improved. The people of the county were very much

surprised at the early rain, and the weather was very much

improved. The people of the county were very much surprised at

the early rain, and the weather was very much improved. The

people of the county were very much surprised at the early rain,

and the weather was very much improved. The people of the

county were very much surprised at the early rain, and the

weather was very much improved. The people of the county

were very much surprised at the early rain, and the weather was

very much improved. The people of the county were very much

surprised at the early rain, and the weather was very much

improved. The people of the county were very much surprised at

the early rain, and the weather was very much improved. The

people of the county were very much surprised at the early rain,

and the weather was very much improved. The people of the



